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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/324,655	06/03/1999	MASASHI TANAKA	Q54422	1832

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SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVE NW
WASHINGTON, DC 20037

EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2662

DATE MAILED: 11/14/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/324,655

Applicant(s)

TANAKA, MASASHI

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Response filed on 09/11/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 5, 6, 7, 8, 9, 10, 16 and 17 are rejected under 35 USC 102(e) as being anticipated by **Terasaki** (US Pat. No. 5,999,532).

In claim 1, **Terasaki** discloses, in Fig.3, an ATM line concentrator 2 (subscriber line concentrator) is connected to an ATM switching unit 1 (ATM switching apparatus) via a User Network Interface (line concentrator is connected to an ATM switching apparatus via a UNI). See col.7, lines 50-57. Subscriber terminals 5, 8 (subscriber terminals) are connected to transmission terminal circuits 17, 18 (network terminators) respectively (a plurality of subscriber terminals are connected to network terminators respectively). See col.5, lines 1-15. The concentrator 2 establishes SVC to subscriber terminals via transmission terminal circuits

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(concentrator accommodates VCs to network terminators). See col.8, lines 23-30. Concentrator 2 includes a signaling termination circuit 20 (a substitution call control function) that executes a signaling procedure between the ATM switch 1 and concentrator 2; and between subscribers 5, 8 and concentrator 2 to establishes VC therebetween (line concentrator includes a substitution call control function to substitute for network terminators and subscriber terminals). See col.6, lines 5-10.

In claims 5, 6 and 16, **Terasaki** discloses line concentrator 2 , transmission terminal circuit 17, and subscriber terminal 5 are connected through PVC 23 when the subscriber terminal 5 sends a request to the line concentrator 2 (line concentrator, network terminator and each subscriber are connected by a PVC connection). See col.7, lines 60-65.

In claims 7, 8 and 17, **Terasaki** discloses a connection request generated by subscriber 5 is transmitted through PVC 23 which has values VPI=0, VCI=5 (PVC connection has VPI/VCI value of 0/5). See col.7, lines 60-65.

In claims 9 and 10, **Terasaki** discloses, in Fig.3, broadband subscribers 5-8 send requests for virtual connections through transmission terminal circuits, ATM line concentration unit 2 and AM switch 1 (call control message is transmitted and received in a same protocol as that for a subscriber data). See col.4, line 65 to col.5, line 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, 13, 14 and 15 are rejected under 35 USC 103(a) as being unpatentable over **Terasaki** (US Pat. No. 5,999,532) in view of **Mendelson et al.** (US Pat. No. 6343083 B1).

In claims 11 and 12, **Terasaki** does not disclose call control message is transmitted/received by a classical IP and ARP over ATM. **Mendelson et al.** discloses, in Fig.2, ARP (ARP) request made by PC 218 on data network 216 (classical IP) is transmitted through ATM endpoints 222 of ATM network 210 (call control message is transmitted and received by a classical IP and ARP over ATM system). See col.13, lines 1-10. Therefore, it would have been obvious to one skill in the art combine the request made by **Mendelson et al.** with **Terasaki** 's concentrator to transmit request using IP and ARP over ATM switches.

In claims 13 and 14, **Terasaki** does not disclose call control message is transmitted by XDSL over ATM through PVC connection. **Mendelson et al.** discloses, in Fig.2, connection request (call control message) is transmitted over ADSL line 224 via ATM network 210. The request message is sent over the control VC (PVC connection). See 8, lines 35-50. **Mendelson et al.** does not disclose XDSL. However, XDSL is a general term and is well-known in the art. It comprises high-bit-rate DSL , adaptive-bit- rate DSL, symmetrical DSL. Therefore, it would have been well-known skills in the art to adapt XDSL comprising high-bit-rate DSL , adaptive-bit-rate DSL, symmetrical DSL, and ADSL.

In claim 15, **Terasaki** does not disclose subscriber terminal and a corresponding network terminator are connected in IEEE 802.3 ethernet. **Mendelson et al.** discloses packet transmitted between PC 218 (subscriber) and ATM endpoint 222 uses IP over Ethernet protocol (IEEE 802.3 Ethernet). See col. 8, lines 32-40 & col.9, lines 20-37. Therefore, it would have

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been obvious to one skill in the art to use IEEE 802.3 Ethernet disclosed by **Mendelson et al.** to connect subscriber terminal to network terminators.

Claims 2-4 are rejected under 35 USC 103(a) as being unpatentable over **Terasaki** (US Pat. No. 5,999,532) in view of **Hijikata et al.** (US Pat. No. 5,864,537).

In claims 2-4, **Terasaki** discloses a connection request generated by subscriber 5 is terminated and extracted by network terminator 17 at line concentrator 2 via SVCs, PVC 23 (subscriber terminal issues a call request to line concentrator, network terminator). See col.7, lines 50-65. **Terasaki** does not disclose a line number is held. **Hijikata et al.** discloses, in Fig.7A, line number #1 (line number) connecting between subscribers 0-23 (subscriber terminal) and distributor #1 (a line number connecting between subscriber terminal and network terminal is held). See Fig.7A, col.7, lines 50-60. Therefore, it would have been obvious to one of ordinary skills in the art to modify the **Terasaki** by having the management table of **Hijikata et al.** in the line concentrator 2 to store the line number with purpose of identifying line number allocated via a virtual connection to subscribers.

Allowable Subject Matter

The indicated allowability of claims 16, 17 are withdrawn in view of the newly discovered reference(s) to Terasaki (col.7, lines 60-65). Rejections based on the newly cited reference(s) follow.

Response to Arguments

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Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kato (US Pat. No. 5,999,514) discloses Virtual Connection on Establishment Controlling Apparatus in a Cell Switching System and Subscriber Service Providing Method, for Use in a Cell Switching System.

Enoki et al. (US Pat. No. 6,421,345 B1) discloses ATM Device.

Watanabe (US Pat. No. 5,771,231) discloses ATM exchange.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3988 for regular communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

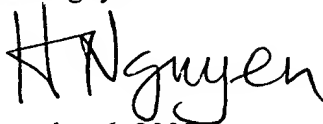
Fax: 703 872-9314

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Hanh Nguyen

A handwritten signature in black ink, appearing to read 'H. Nguyen' or 'Hanh Nguyen', written in a cursive style.

November 6, 2003

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